



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/605,348	09/24/2003	Peter C. Williams	22188/06726	2347
24024	7590	04/25/2006	EXAMINER	
CALFEE HALTER & GRISWOLD, LLP			HEWITT, JAMES M	
800 SUPERIOR AVENUE			ART UNIT	PAPER NUMBER
SUITE 1400			3679	
CLEVELAND, OH 44114			DATE MAILED: 04/25/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/605,348	WILLIAMS ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	James M. Hewitt	3679	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 08 February 2006.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1 and 37 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1 and 37 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 08 February 2006 is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2/8/06</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Drawings*

The drawings were received on 2/8/06. These drawings are acceptable.

### *Specification*

The disclosure is objected to because of the following informalities:

In paragraph [0057], lines 1-2, it is unclear as to how Figures 8 and 9 can be said to show a modified rear ferrule when Figures 8 and 9 are said to show the same rear ferrule as in Figure 5.

Appropriate correction is required.

### *Claim Objections*

Claims 1 and 37 are objected to because of the following informalities:

Claim 1 is objected to under 37 C.F.R. 1.75(i), which states "Where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation."

In claim 1, it is unclear as to how the movement of the second ferrule can be characterized by the phrase "toggle-like hinging action". The normal use of the word "toggle" is to move back and forth. This is not the case of the ferrule as once it is deformed inward by the drive member it does not toggle back at any time even if the drive member is removed. The action may be described as "hinging" but to describe the

radially inward deformation as “toggle-like” appears to be incorrect. For examination purposes, the phrase “toggle-like hinging action” has been interpreted to convey pivoting or hinging action.

In claim 37, lines 18-19, the phrase “to produce a swaged region of *high gripping pressure of a portion of said cylindrical interior wall* against said tube end outer surface” is awkward and confusing.

Appropriate correction is required.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claim 37 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 22 and 28 of copending Application

No. 10/374,026. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 22 and 28 are substantially inclusive of all of the elements and limitations of claim 37.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 37, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Teeters (US 3,215,457) in view of Kreidel (US 2,171,217) or Kreidel (US 2,230,116).

With respect to claim 1, Teeters discloses a tube fitting of the type including a fitting body (2) having a cylindrical bore for receiving a tube end and including a tapered mouth (5) at one end of said bore (see Fig. 1); a drive member (4) having a threaded engagement with said body and having a ferrule drive surface (24); a first ferrule (8) having a tapered first end (13) that extends into said tapered mouth of the fitting body and having a second end (15) with a tapered recess (16) that axially extends toward said first end; and a second ferrule (11) having a substantially continuous cylindrical interior wall that closely surrounds the tube end, a tapered nose portion (25) that

extends into said tapered recess of said first ferrule, and a driven surface (23) on a back end thereof that engages said ferrule drive surface; the improvement wherein said second ferrule has a rear portion of said cylindrical interior wall that is radially spaced from the tube end upon pull-up of the fitting (see Fig. 3), a forward edge of said tapered nose portion that is directed radially inward to penetrate an outer surface of the tube end (see Fig. 3), and a collet portion of said substantially continuous cylindrical interior wall that is axially behind said forward edge; said second ferrule is also plastically deformed during pull-up of the fitting with a 'toggle-like' hinging action that results when said rear portion moves radially outward from said outer surface of the tube end about a region of said second ferrule that joins said rear portion to said collet portion so that said collet portion upon pull-up of the fitting is deformed radially against said outer surface of the tube end to collet the tube end (refer to Figs. 2 and 3, and column 3, lines 22-50).

Note that the movement of the second ferrule as shown between Figures 2 and 3 is considered to constitute a 'toggle-like' hinging action inasmuch as, like Applicant's ferrule, 'toggles' or moves from the position shown in Figure 2 to that shown in Figure 3.

Teeters fails to teach that said second ferrule is case hardened about its entire surface. The patent 2,171,217 to Kreidel and 2,230,116 to Kreidel both disclose that it is known in the prior art to provide a similar type coupling with the ferrule 10 of Kreidel '217 and the ferrule b of Kreidel '116 being case hardened (see Kreidel '217 page 2, column 1, lines 65-75 continuing to column 2, lines 1-10 and Kreidel '116 page 1, column 2, lines 15-50) in order to properly bite into the inserted tube. It would have been obvious to one having ordinary skill in the art at the time the invention was made

to harden the biting, second ferrule of Teeters as taught in the prior art of either Kreidel '217 or Kreidel '116, in order to provide a more secure coupling for the inserted tube due to increased compressibility of the ferrule into the surface of the softer inserted tube and thereby insuring a steadfast connection.

With respect to claim 37, Teeters discloses a tube fitting comprising: a fitting body (2) having a cylindrical bore for receiving a tube end (1) and including a tapered mouth (5) at one end of said bore; a drive member (4) having a threaded engagement with said body and having a ferrule drive surface (24); a first ferrule (8) having a tapered first end (13) that is insertable into said tapered mouth of the fitting body and having a second end (15) with a tapered recess (16) that axially extends toward said first end; and a second ferrule (11) having a substantially continuous cylindrical interior wall that closely surrounds the tube end when installed thereon, a tapered nose portion (25) that is insertable into said tapered recess of said first ferrule, and a driven surface (23) on a back end thereof that engages said ferrule drive surface during pull-up of the fitting; and wherein second ferrule has a configuration such that upon pull-up of the fitting said second ferrule will deform to cause a forward edge of said tapered nose portion to penetrate an outer surface of the tube end (see Fig. 3), a rear portion of said cylindrical interior wall to be radially spaced from said tube end outer surface (see Fig. 3), and said second ferrule will also deform with a hinging action that occurs between said back end and said forward edge to produce a swaged region of high gripping pressure of a

portion of said cylindrical interior wall against said tube end outer surface (refer to Figs. 2 and 3, and column 3, lines 22-50).

Note that the movement of the second ferrule as shown between Figures 2 and 3 is considered to constitute a hinging action. The ferrule hinges from the position shown in Figure 2 to that shown in Figure 3.

Teeters fails to teach that said second ferrule is case hardened about its entire surface. The patent 2,171,217 to Kreidel and 2,230,116 to Kreidel both disclose that it is known in the prior art to provide a similar type coupling with the ferrule 10 of Kreidel '217 and the ferrule b of Kreidel '116 being case hardened (see Kreidel '217 page 2, column 1, lines 65-75 continuing to column 2, lines 1-10 and Kreidel '116 page 1, column 2, lines 15-50) in order to properly bite into the inserted tube. It would have been obvious to one having ordinary skill in the art at the time the invention was made to harden the biting, second ferrule of Teeters as taught in the prior art of either Kreidel '217 or Kreidel '116, in order to provide a more secure coupling for the inserted tube due to increased compressibility of the ferrule into the surface of the softer inserted tube and thereby insuring a steadfast connection.

#### ***Response to Arguments***

Applicant's arguments filed 2/8/06 have been fully considered but they are not persuasive.

Regarding Applicant's arguments with respect to the phrase "toggle-like hinging action", note the new objection to the phrase as explained above (see *Claim Objections*).

Regarding Applicant's arguments that the art of record, namely Teeters '457, does not exhibit the claimed hinging action, but rather rolls or gyrates, the Examiner disagrees. The rolling or gyration of Teeters' second ferrule, as shown in Figures 2 and 3, is considered to constitute a 'toggle-like' hinging action or hinging action alone inasmuch as, like Applicant's ferrule, 'toggles' or rotates from the position shown in Figure 2 to that shown in Figure 3. This action provides a deep penetration of the second ferrule (11) into the tube (1).

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James M. Hewitt whose telephone number is 571-272-7084.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Stodola can be reached on 571-272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JAMES M. HEWITT  
PRIMARY EXAMINER